What is claimed is:

1. A system comprising a solid surface, wherein the surface has attached thereto one or more MHC monomer or modified MHC monomer wherein the monomer incorporates from solution a suitable MHC-binding peptide.

2. The system of claim 1, wherein the monomer is MHC class I and the monomer incorporates the MHC-binding peptide under reconstituting conditions.

3. The system of claim 1, wherein the solid surface is a bead.

4. The system of claim 1, wherein the solid surface is in a microtiter plate.

5. The system of claim 1, wherein the solid surface is suitable for screening in a high throughput system.

6. The system of claim 1, wherein attachment of the monomer to the solid surface is reversible.

7. The system of claim 1, wherein attachment of the monomer to the solid surface is cleavable.

8. The system of claim 1, wherein the solid surface is coated with a first binding ligand and the C-terminal end of the monomer is provided with a second binding ligand, wherein the first ligand binds specifically with the second ligand.

9. The system of claim 7, wherein the first binding ligand is selected from avidin, streptavidin, neutravidin, StrepTactin and monomeric avidin and the second binding ligand is biotin.

10. The system of claim 8, wherein the second binding ligand is attached to the monomer via a C-terminal end.

11. The system of claim 1, wherein the monomer is an MHC class I monomer and the monomer denatures under denaturing conditions and reconstitutes to incorporate the MHC-binding peptide under renaturing conditions.

12. The system of claim 11, wherein the denaturing conditions comprise a pH of about 2 to about 4.

13. The system of claim 1, wherein the system further comprises an anti-MHC antibody that binds specifically to a conformational epitope that is present in the reconstituted monomer and absent in the denatured monomer.

14. The system of claim 1, wherein the reconstituting conditions include a pH of from about 7 to about 8.5.

15. The system of claim 1, wherein the system further comprises beta-2 microglobulin.

16. The system of claim 14, wherein the monomer is HLA class I.

17. The system of claim 15 further comprising an anti-MHC class I monoclonal antibody, wherein the monoclonal antibody specifically binds to a reconstituted monomer and does not bind to a denatured monomer.

18. The system of claim 17, wherein the system further comprises beta-2 microglobulin and a suitable HLA-binding peptide of from about 8 to about 12 amino acids; wherein a reconstituted monomer binds to the beta-2 microglobulin and the suitable peptide under reconstituting conditions.

19. The system of claim 17, wherein the monoclonal antibody is produced by hybridoma B9.12.1

20. The system of claim 1, wherein the monomer is HLA class II.

21. The system of claim 20 further comprising a monoclonal antibody that distinguishes between a monomer bound to a MHC-binding peptide and a monomer that lacks a MHC-binding peptide.

22. The system of claim 21, wherein the monomer is HLA class II and the system further comprises a suitable HLA-binding peptide of from about 10 to about 30 amino acids; wherein a reconstituted monomer binds to the suitable peptide under reconstituting conditions.

23. The system of claim 1, 17, or 22 wherein the solid surface coated with the monomers is in a dried form.

24. A kit comprising the system of claim 1, 17 or 22.

25. The kit of claim 23 further comprising an instruction.

26. The kit of claim 24 further comprising a control peptide to which the MHC monomer binds in a reconstituted form.

27. A method for determining binding between a MHC class I monomer or modified MHC class I monomer and a putative MHC-binding peptide therefor, said method comprising:

incubating under reconstituting conditions a solid surface having attached thereto a plurality of MHC monomers or modified MHC monomers in the presence and absence of the putative MHC-binding peptide, wherein the monomers have been denatured and reconstitute to form a complex containing a suitable MHC-binding peptide under reconstituting conditions, and

determining binding to the MHC monomers after contact therewith of a monoclonal antibody that binds to the MHC complex but does not bind to dissociated components of the MHC complex, which binding of the antibody indicates binding of the monomers with the putative MHC-binding peptide.

28. The method of claim 27, wherein the denaturing conditions include a pH in the range from about 2 to about 4.

29. The method of claim 27, further comprising separately incubating the monomers with a standard MHC-binding peptide for the monomers under the reconstituting conditions in the presence of the monoclonal antibody, and wherein the determining includes comparing binding of the antibody caused by the standard peptide to the binding of the antibody caused by the putative MHC-binding peptide.

30. The method of claim 29, wherein the monomers are HLA class I, the monoclonal antibody is an anti-MHC-class I antibody, and the reconstituting conditions include the presence of sufficient beta-2 microglobulin for reconstitution of the monomers.

31. The method of claim 30, wherein the monomers are HLA subclass A, B or C.

32. A method for determining binding between a MHC class II monomer or modified MHC class II monomer and a putative MHC-binding peptide therefor, said method comprising:

incubating under suitable peptide loading conditions a solid surface having attached thereto a plurality of MHC monomers or modified MHC monomers in the presence and absence of the putative MHC-binding peptide to form a complex containing a suitable MHC-binding peptide, and

determining binding of the MHC monomers with the putative MHC-binding peptide.

33. The method of claim 32, wherein the monomers are HLA class II and the determining comprising contacting the complex with a monoclonal antibody that determines the binding of the MHC monomers with the putative MHC-binding peptide.

34. The method of claim 32 wherein the antibody distinguishes between a monomer that is bound to an MHC-binding peptide and a monomer that is not bound to an MHC-binding peptide.

35. The method of claim 32, wherein the suitable peptide loading conditions include a pH in the range from about 4 to about 8.

36. The method of claim 32, further comprising separately incubating the monomers with a standard MHC-binding peptide for the monomers under the suitable conditions, and wherein the determining includes comparing binding of the standard peptide to the binding caused by the putative MHC-binding peptide.

37. The method of claim 32, wherein the monomers are HLA subclass D, DR, DP or DQ.

38. The method of claim 27 or 33, wherein the monoclonal antibody is provided with a detectable label and the determining includes detecting the detectable label.

39. The method of claim 38, wherein the detectable label is peroxidase.

40. The method of claim 38, wherein the detectable label is a secondary antibody that specifically binds to the monoclonal antibody.

41. The method of claim 40, wherein the detectable label is fluorescent.

42. The method of claim 27 or 33, wherein the solid surface is the wells of a microtiter plate or beads and the determining includes reading fluorescence with a fluorometer.

43. The method of claim 42, wherein the detecting further comprises detecting the fluorescence using high throughput scanning.

44. The method of claim 27 or 32, wherein the solid surface is coated with avidin and the monomers are biotinylated to attach to the solid surface.

45. The method of claim 27 or 21, wherein attachment of the monomers to the solid surface is reversible.

46. The method of claim 27 or 32, wherein attachment of the monomers to the solid surface is cleavable.

47. A method for determining the degree of binding affinity of an MHC class I monomer or modified MHC class I monomer for a putative MHC-binding peptide therefor, said method comprising:

incubating at least one denatured MHC monomer or modified MHC monomer attached to a solid surface with the putative MHC-binding peptide and a monoclonal antibody that specifically binds to a conformational epitope in a first complex containing a corresponding reconstituted MHC monomer and does not bind to any dissociated component of the MHC complex, wherein the incubation is under reconstituting conditions; and

comparing binding of the monoclonal antibody to the MHC complex that contains the putative MHC-binding peptide with binding of the monoclonal antibody to a corresponding complex containing the monomer and a known MHC-binding peptide,

wherein a difference in the bindings indicates the relative degree of binding affinity of the reconstituted monomer for the putative MHC-binding peptide.

48. The method of claim 47, wherein the reconstituting conditions include a temperature in the range from about 4°C to about 37°C.

49. The method of claim 47, wherein the reconstituting conditions include a temperature in the range from about 4°C to about 8 °C.

50. The method of claim 47, wherein the reconstituting conditions include a pH in the range from about 7 to about 8.5.

51. The method of claim 47, wherein the reconstituting conditions include the presence of a suitable reconstitution buffer.

52. The method of claim 47, wherein the monomers further bind with beta-2 microglobulin in reconstituting conditions and the monoclonal antibody is an anti-MHC-class I monoclonal antibody.

53. The method of claim 51, wherein the monomers are selected from HLA-A, HLA-B, and HLA–C.

54. The method of claim 53, wherein the monoclonal antibody is produced by hybridoma B9.12.1.

55. A method for determining the degree of binding affinity of an MHC class II monomer or modified MHC class II monomer for a putative MHC-binding peptide therefor, said method comprising:

incubating under suitable binding conditions at least one MHC class II monomer or modified MHC class II monomer attached to a solid surface with the putative MHC-binding peptide and a monoclonal antibody that specifically binds to an epitope in a first complex containing the monomer and does not bind to any dissociated component of the MHC complex; and

comparing binding of the monoclonal antibody to the MHC complex that contains the putative MHC-binding peptide with binding of the monoclonal antibody to a corresponding complex containing the monomer and a known MHC-binding peptide, wherein a difference in the bindings indicates the relative degree of binding affinity of the monomer for the putative MHC-binding peptide.

56. The method of claim 55, wherein the binding conditions include a pH in the range from about 4 to about 8.

57. The method of claim 47 or 55, wherein the incubating is for a period of from about 12 hours to about 48 hours.

58. The method of claim 47 or 55, wherein the antibody is provided with a detectable label and wherein the comparison of binding comprises detecting a difference in the respective signals produced by the detectable label resulting from binding of the antibody thereto.

59. The method of claim 58, wherein the antibody is labeled with a fluorescent label and the comparison of binding comprises detecting a difference in the respective fluorescence resulting from binding of the antibody thereto.

60. The method of claim 59, wherein the fluorescent label is fluorescein isothiocyanate (FITC).

61. The method of claim 47 or 55, wherein the solid surface is the wells of a microtiter plate or beads and the detecting includes reading the fluorescence with a fluorometer.

62. The method of claim 61, wherein the detecting further comprises detecting the fluorescence using a high throughput scanning.

63. The method of claim 55, wherein the monomers are selected from HLA-D, DR, DP or DQ subclasses.

64. The method of claim 47 or 55, wherein the monomers are chimeric.

65. The method of claim 47 or 55, wherein the difference in the binding is compared after incubating the MHC complex containing the putative MHC binding peptide and the known peptide under conditions comprising a dissolution-testing temperature for a time sufficient to indicate the relative dissolution rate of the putative MHC-binding peptide.

66. The method of claim 65, wherein the dissolution-testing temperature is in the range from about 4°C to about 37° C.

67. The method of claim 65, wherein the time is from about 2 hours to about 48 hours.